



# Inter-Agency Coordination on the Development of Health Assessments



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## NCEA

- Strives to reduce environmental risks as part of the US EPA mission to protect human health and to safeguard air, water, and land upon which life depends.
- Conducts risk assessments, carrying out research to improve the state-of-the-science of risk assessments. IRIS assessments (<http://www.epa.gov/iris>) establish oral reference doses (RfDs) and inhalation reference concentrations (RfCs) for chronic noncarcinogenic health effects as well as hazard identification, oral slope factors, and oral and inhalation unit risks for carcinogenic effects. These values are reported in IRIS Summaries and Toxicological Reviews.
- Manages IRIS, a database that contains the Agency's scientific consensus positions on human health effects that may result from exposure to chemical substances in the environment.
- Provides guidance and support to risk assessors, various EPA programs, and other users.

## ATSDR

- Serves the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related exposures to toxic substances.
- As the lead Agency within the Public Health Service for implementing the health-related provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), ATSDR is charged to assess the presence and nature of health hazards at specific Superfund sites, to help prevent or reduce further exposure and the illnesses that result from such exposures, and to expand the knowledge base about health effects from exposure to hazardous substances.
- Develops Toxicological Profiles (<http://www.atsdr.cdc.gov/toxpro2.html>) to ascertain significant human exposure levels. Minimum Risk Levels (MRLs) are derived for acute ( $\leq 14$  days), intermediate (15-364 days), and chronic (365 days and longer) exposure durations, for the oral and inhalation routes of exposure.

- NCEA and ATSDR share a responsibility for developing assessments for environmental chemicals and making these assessments available to the public.
- The two agencies agreed to increase their coordination on the development of health assessments for hazardous chemicals found in the environment.
- NCEA and ATSDR established a Memorandum of Understanding (MOU) in December 2004 as a mechanism for cooperation between the two agencies.
- A working group was established to identify chemical-specific priorities of mutual interest and potential points of interaction.

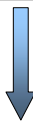


## MOU

- Encourages scientists from the two agencies to participate more actively in the development of each other's assessments.
- Provides opportunities for the two agencies to share resources (i.e., literature search and retrieval efforts) to prevent redundancy.
- Increases quality of assessments by exchanging scientific expertise.
- Expands coordination in development of health assessments, leverages federal resources and improves scientific concordance.

## Collaboration under the MOU

Communication between chemical managers  
Sharing chemical information and scientific products  
Participation in agency workgroup discussions on scientific issues



1,1,1-Trichloroethane  
2-Hexanone  
Lead  
Hexachloroethane  
Arsenic

Dichlorobenzenes  
Barium  
Xylenes  
1,4-Dioxane  
Carbon Tetrachloride

1,1,2,2-Tetrachloroethane  
Heptachlor  
Benzene  
Hydrogen Sulfide  
Acrolein

## 1,1,2,2-Tetrachloroethane

- NCEA consulted with ATSDR to identify areas of coordination in developing a health assessment.
- ATSDR contributed to preparation of assessment by sharing guidance documents, estimated levels of effort, and literature retrieved in preparing a 1996 Toxicological Profile.
- NCEA consulted with ATSDR at each stage of development (including attending scientific discussions within the agency) of the draft assessment to provide a document that is directly applicable to the development of ATSDR's Toxicological Profile.
- NCEA shared the preliminary draft of the assessment with ATSDR.
- ATSDR consulted with NCEA prior to updating the Toxicological Profile.
- The NCEA and ATSDR chemical managers continue to communicate and work together as both agencies develop their respective assessments.

EPA has prepared and completed IRIS assessments characterizing qualitative and quantitative human health risk information for more than 500 chemical substances. ATSDR has published 275 profiles containing toxicological and adverse health effects information covering over 900 substances. Implementation of the MOU has provided NCEA and ATSDR the opportunities to collaborate on the development of assessments for 15 chemicals. Scientists within NCEA and ATSDR engaged in scientific discussions during the development of these assessments and collaborated on literature search and retrieval efforts as well as quantitative modeling projects. Communication and exchange of scientific expertise between the two agencies strengthens the quality of health assessments and supports the coordination in their development, enabling the US EPA and ATSDR to leverage federal resources and improve scientific concordance. NCEA and ATSDR have maintained the MOU for over a year and continue to increase awareness, facilitate interactions, and exchange scientific data and expertise.

*The views expressed in this poster are those of the authors and do not necessarily reflect the views or policies of the US Environmental Protection Agency*



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